

Market Potential 72% Consumer Confidence 46% Brand Loyalty 51% Energy Savings 69% Market Transformation 88% Adv
3% Energy Efficiency 27% Product Awareness 57% Customer Satisfaction 74% Market Share 69% Program Participation 82%

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What is Motivating Residential Green Power Purchasers?

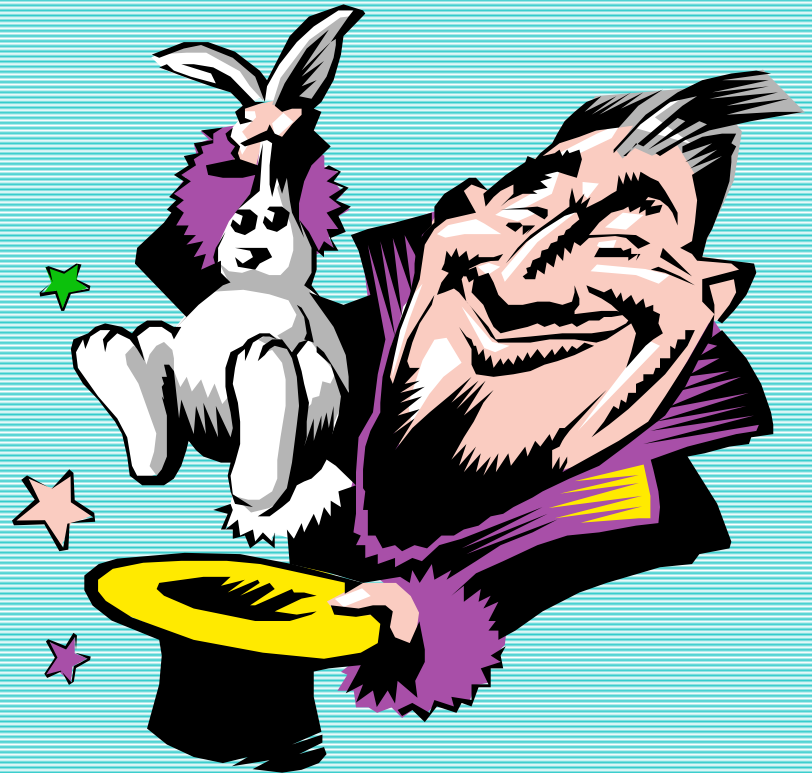
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Overview

- **Inklings of an idea**
 - California
 - NREL
- **Possible theories of motivation and change**
- **Recent studies**
 - Wisconsin
 - TVA
 - National study
- **Changing marketing message for Green Power**
- **Acknowledgements**



California, 1998

➤ EPA Landfill Gas Focus Groups

- Held at Sacramento Municipal Utility District
- SMUD has Greenergysm Program

➤ Greenergysm Customers

- “If I don’t do it, who will?”
- “It seems important to take the first step”

➤ Other Customers

- “Why should I do it if everyone else isn’t.”
- “I think it should be the same for everyone.”

Participation is Behind WTP

- **Barbara Farhar (1999) at NREL documented high willingness to pay for renewable energy.**
 - **An average of 70% of customers willing to pay \$5 per month additional for renewable power, across 12 different utility studies.**
- **In 2000 NREL reported green power programs rarely exceed 2% participation.**
 - **SMUD 1.4%, MG&E >4%.**
- **In 2002, Renewable NW found some local utility programs >3-4%**

Some Theories To Consider

- **Theory of Planned Behavior (Azjen, 1988)**
 - Attitudes have linkage to behavior though perceived behavioral control and intentions.
- **Self Efficacy (Bandura, 1977) and Response Efficacy (Bandura, 1997)**
 - **Self Efficacy**
 - The individual's perception of their own control over performing a behavior effectively.
 - **Response Efficacy**
 - The perception that the behavior will have predictable and desirable outcomes.

Wisconsin Focus on Energy

- **Evaluation of WI Focus on Energy Program.**
- **Specific effort to track effects of renewable energy advertising**
 - **Awareness of renewable energy increased from 46% Nov 1999 to 52% May 2000.**
 - **Awareness of campaign advertisements increased from 17% to 28%.**
 - **Changes in self-efficacy beliefs correlated with consumer response to ads.**

More Wisconsin

- **High self-efficacy seems most likely explanation for:**
 - **Ad recall**
 - **Increased awareness of ads**
 - **Increased motivation to seek information from advertisers and contractors**
 - **Motivating respondents to think about how to apply the information**

TVA Research

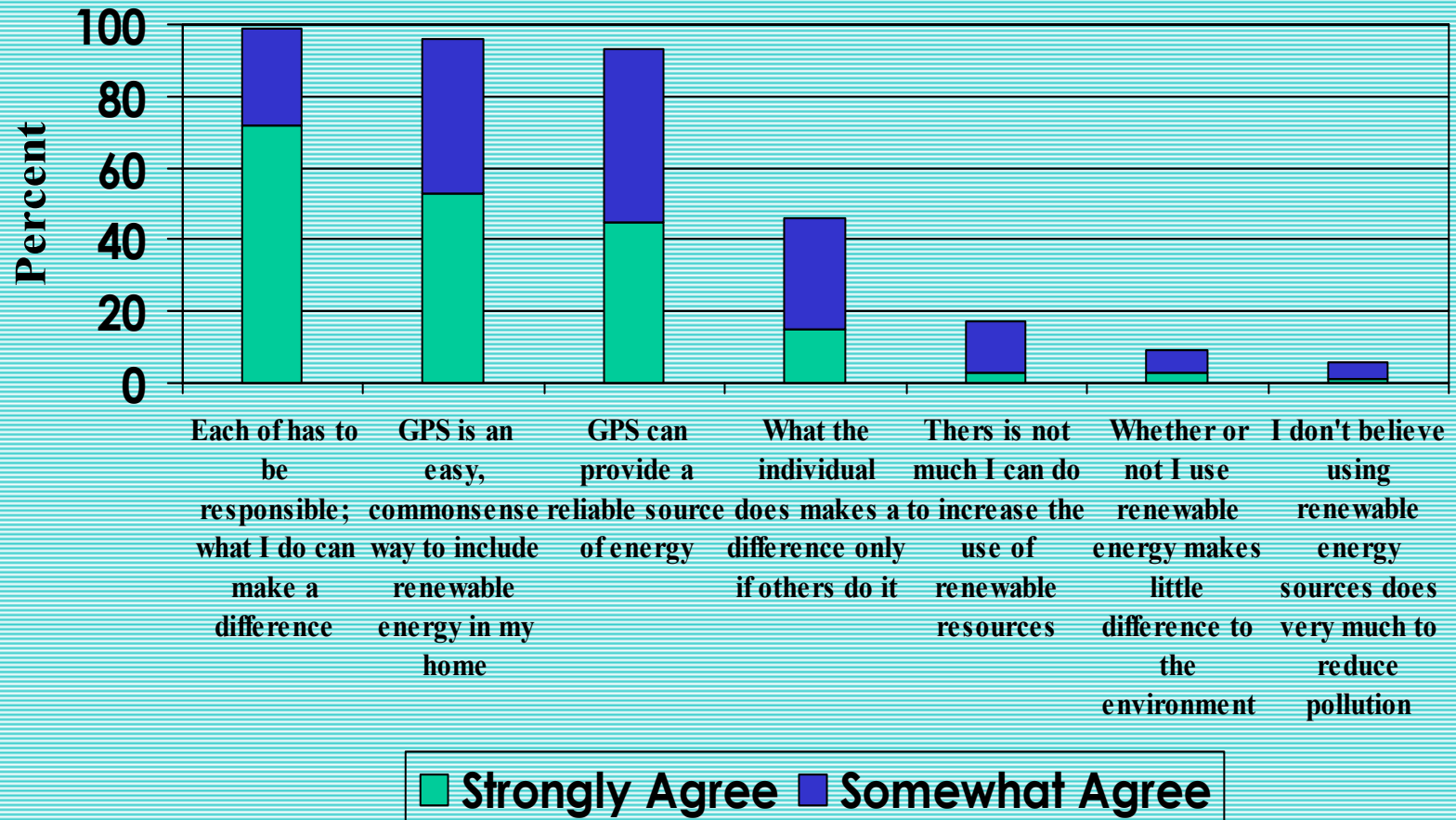
➤ One year after Green Power Switchsm began:

- Participation rate was a bit lower than expected, but
- Purchased residential blocks exceeded expectations with the average purchase at 1.7 blocks
- Purchased commercial blocks exceed expectations at over 5,000 blocks.

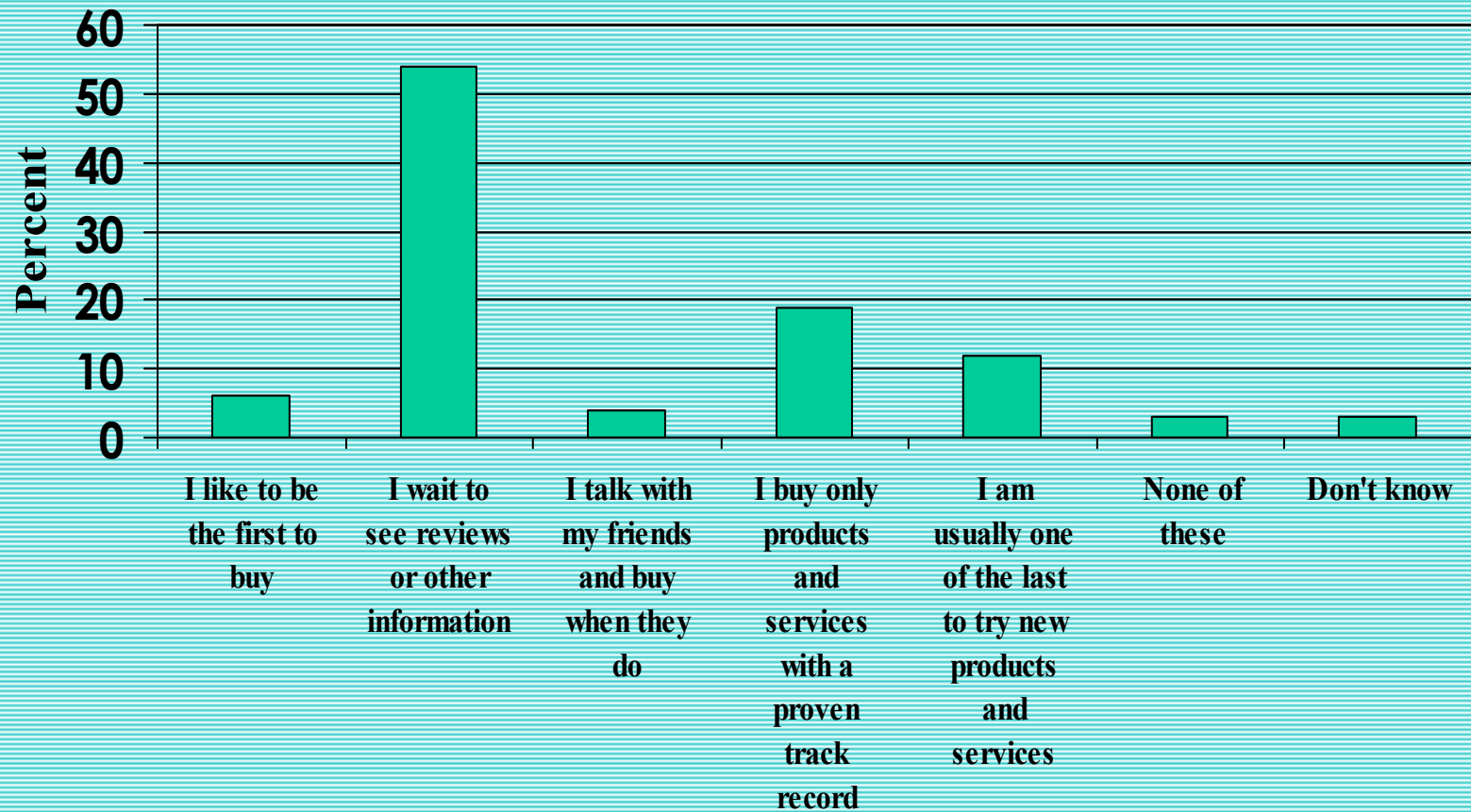
More TVA Research

- Survey conducted spring 2001
- Respondents very enthusiastic
- Self-efficacy responses higher than product innovativeness
- Other findings
 - 60% member church or religious group
 - 46% member environmental group
 - 54% knew some or a lot about green power prior to hearing about the program

Self-Efficacy Was High



Not Innovators



What Really is Self-Efficacy?

- **A personal judgment of confidence.**
 - Tends to be task specific and context-sensitive.
 - Made and used in reference to some type of goal.
 - Can I do this?
- **Self-concept is a judgment of self-worth.**
 - Not task or context specific.
 - Who am I? How do I feel about?

National Green Power Study

- Over 1,100 respondents; nearly 700 participants in a utility green power program.
- Self-efficacy questions were used, but problems in data collection resulted in incomplete results.
 - The trend, though not significant, showed:
 - Perceptions that it is important to make a purchase of green power (high self-efficacy) led to higher probability of participation.
 - While perception of others needing to make these purchases first (low self-efficacy) led to lower probability of participation.

Participation Model Results

- Analysis shows that probability to participate was higher for those who:
 - Make donations to public TV or to environmental causes.
 - Recycle, eat organic foods, purchase goods from environmentally friendly companies, or have advanced college degrees.
- The probability of participation is lower for those who:
 - Volunteer at schools, or hunt.

Implications of Research

- **Some predictors may just reflect the sources of lists.**
 - Public TV donations
 - Environmental organizations donations
 - Buy organic foods
 - Purchase goods from green companies
- **Others may reflect consistent behaviors**
 - Recycling
- **Or real demographic characteristics**
 - Post college education

Lets Not Stop Here

- Self-efficacy appears to be a key
- Wisconsin Focus on Energy campaign has shifted message to a “Can Do” approach.
- We will continue to research and suggest marketers begin to test new messages



Changing the Marketing Message

- **Message should enhance perception of self-efficacy about the purchase of green power.**
 - You can do this! If you don't who will?
 - This is an opportunity for you to make a difference!
- **Message should enhance sense that purchase will have the response sought.**
 - This will lead to green power being built, operated.
 - This will increase the amount of green power, renewables available.
 - This will result in cleaner environment, less global warming, etc.